SAN FRANCISCO DISTRICT

US Army Corps of Engineers

PUBLIC NOTICE

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RESPONSE REQUIRED BY: December 13, 2000

Regulatory Branch
333 Market Street
San Francisco, CA 94105-2197

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1. **INTRODUCTION:** Mr. Brian Foss, Santa Cruz Port District (Port District), 135 5th Avenue, Santa Cruz, California, 95062, has applied for a Department of the Army permit to conduct a dredged material disposal demonstration project at the Santa Cruz Harbor (Harbor) in Santa Cruz, Santa Cruz County, California. The purpose of the project is to determine if clean, fine-grained harbor sediments can be disposed into the near-shore area at Santa Cruz in a manner beneficial to the down-coast beaches and without harm to coastal resources. This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). The Corps of Engineers is currently processing a Port District application for regular maintenance dredging of the Harbor.

2. **PROJECT DESCRIPTION:** As shown in the attached drawings, the applicant has proposed removing approximately 12,000 cubic yards (cys) of sediment from approximately 2.4 acres of the North Harbor area and disposing it in the near-shore area just east of the harbor jetty. The design depth in the North Harbor dredge area would be from -8 feet Mean Lower Low Water (MLLW) in the berth areas to -10 feet MLLW in the channel areas, plus a two-foot allowance for overdepth dredging. The sediments have been tested and found (by an interagency group) to be suitable for unconfined aquatic disposal. A grain-size analysis of the sediments indicate that the composition is 58.2% fines (29.5% clay and 28.7% silt) and 41.8% sand. This material would not normally qualify as beach nourishment material because it is less than 80% sand. At present, the policy of the Corps of Engineers (and the U.S. Environmental Protection Agency) is that, lacking sound information regarding the impacts of fine-grained material on the aquatic environment, beach replenishment material should be approximately 80% sand or compatible with the receiving beach. The receiving beach at Santa Cruz is over 90% sand.

The Port District contends that the 80% sand guidance is too restrictive and precludes the beneficial use of otherwise clean sediments.

The Port District has already begun to study the issue. In September of 1999, the Port District and the State of California Department of Boating and Waterways sponsored a Sediment Transport Analysis study of the 25 square mile area adjacent to the Santa Cruz Harbor. According to the applicant, the study (conducted by Patrick McLaren Ph.D., Physical Geology, of GeoSea Consulting [Canada] Ltd.) concluded that fine-grained sediments (silts and clays) do not, and will not, remain in the near-shore Santa Cruz area.

Assuming that the Port District's regular maintenance dredge permit will be issued by the Corps of Engineers, the applicant proposes the following project protocol, which apply only to the demonstration project:

1. Dredging of the inner harbor sediments will be no deeper than the design and overdredge depths allowed by the maintenance permit.

2. Dredging and disposal of the fine grained material will be conducted during high wave energy periods: December through March.

3. Three or four dredge and disposal episodes will occur weekly.

4. Episodes will occur between 4:00 p.m. and 10:00 p.m. to avoid contact with swimmers and surfers, as much as is possible.

5. Approximately 500-700 cys of sediments will be dredged and disposed during each episode.

6. Tracking of the episodic discharges will be by a team from Moss Landing Marine Lab, headed by Gary Green, Ph.D., Marine Geology.

7. There will be inter-agency oversight of the episodes so that dredging can be terminated quickly if it is found that fine-grained material is residing in the near-shore area or significant adverse impacts are detected.

8. Other constraints will be incorporated into the project as directed by the appropriate regulatory agencies.

According to the applicant, the following will be benefits from the proposed project:

1. Loss of sand to recreational beaches is a nationwide problem. The proposed project will save approximately 5,000 cys of sediment for beach replenishment (sediment that would be lost to the beach if disposal is upland or farther off shore).

2. The proposed project will result in a savings. The estimated savings to the Federal Emergency Management Agency (FEMA) is $100,000 to $200,000.

3. Silt and clay fractions will be transported to the ocean and will not settle in the inner harbor.

4. Dredging and disposal during December through March will mimic the high flows from nearby watersheds and rivers, which occur during that time of the year.

5. The proposed project will advance the science of sediment transport and management. This could be beneficial on a regional, west-coast or national level.

In 1997, the Port District was authorized by the regulatory agencies to dispose clean, inner harbor sediments into the surf zone. The sediments were composed of approximately 68% sand and 32% fines. Approximately 3,000 cys of sediment was disposed in the surf zone at the rate of approximately 500 cys per episode. Reconnaissance dives were made before and after each episode. According to the applicant, no residual fine-grained sediments were found on the near-shore kelp beds. The adjacent beach was tested 12 hours after the disposal episodes were completed and was found to be 100% sand. According to the applicant, the Sediment Transport Analysis by GeoSea confirms the 1997 disposal experience and assumption: silts and clays are not stable in the near-shore. This would be especially true in the high energy winter wave environment.

3. **STATE APPROVALS:** Under Section 401 of the Clean Water Act (33 U.S.C. Section 1341), an applicant for a Corps permit must obtain a State water quality certification or waiver before a Corps permit may be issued. The applicant has provided the Corps with evidence that he has submitted a valid request for State water quality certification to the Central Coast Regional Water Quality Board. No Corps permit will be granted until the applicant obtains the required certification or waiver. A waiver shall be explicit, or it will be deemed to have occurred if the State fails or refuses to act on a valid request for certification within 60 days after the receipt of a valid request, unless the District Engineer determines a shorter or longer period is reasonable for the State to act.

Those parties concerned with any water quality issues that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, Central Coast Region, 81 Higuera Street, Suite 200, San Luis Obispo, California 93401-5414, by the close of the comment period of this public notice.

The project is in the jurisdictional purview of the California Coastal Commission (CCC). The applicant will be required to obtain a permit from CCC after the RWQCB has made a determination of water quality certification for this project.

4. **PRELIMINARY ENVIRONMENTAL ASSESSMENT:** Because the environmental impacts of disposal are the object of the proposed project, the Corps of Engineers has assessed only the environmental impacts of the dredging portion of the proposed project, in accordance with the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190), and pursuant to Council on Environmental Quality's Regulations, 40 CFR 1500-1508, and Corps of Engineers' Regulations, 33 CFR 230 and 325, Appendix B. Unless otherwise stated, the Preliminary Environmental Assessment describes only the impacts (direct, indirect, and cumulative) resulting from activities within the jurisdiction of the Corps of Engineers.

The Preliminary Environmental Assessment resulted in the following findings:

a. IMPACTS ON THE AQUATIC ECOSYSTEM

(1) PHYSICAL/CHEMICAL CHARACTERISTICS AND ANTICIPATED CHANGES

Substrate - The North Harbor area to be dredged cover an area of approximately 2.4 acres. Existing depths are from 0.0 feet MLLW to -11 feet MLLW, depending on the location. Sediments in the North Harbor are a combination of sands, silts and clays. The proposed dredging work would remove approximately 12,000 cys of sediment from the North Harbor area, on a one time basis. The dredging would lower the substrate elevations to a design depth of -8 to -10 feet MLLW (plus a two-foot overdepth allowance) in the North Harbor area. Since the natural processes of sediment loss, transport and accretion may cause similar disturbances to the substrate, the associated effects of dredging operations on substrate conditions would be adverse but short-term and minor to moderate in magnitude.

Erosion/Sedimentation Rate - Dredging work would result in localized sloughing of sediment along the side slopes and portions of the channels and berths, increasing the rate of erosion and sedimentation until a stable angle of repose is attained. Considering the proposed depth and volume of material to be removed, the associated effects of dredging operations on erosion and sedimentation rates would be adverse but short-term and minor to moderate in magnitude.

Water Quality - Dredging operations may affect water quality variables such as dissolved oxygen (DO), pH, salinity, total suspended solids (TSS), and turbidity. Turbidity near the dredging site would increase because of additional TSS in the water column. Since ambient water quality conditions recur shortly after each dredging event, the associated effects of dredging operations on these water quality variables would be adverse but short-term and minor in magnitude.

The suitability of the proposed dredge material

for disposal in the proposed aquatic location was evaluated by an interagency group consisting of representatives from the Corps of Engineers, the U.S. Environmental Protection Agency, the Central Coast Regional Water Quality Control Board, the California Coastal Commission, the State Lands Commission and the Monterey Bay National Marine Sanctuary. Advisory to this interagency group are the U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the California Department of Fish and Game. The group considered chemical and biological test results submitted by the applicant according to guidelines within the testing manual entitled "Evaluation of Dredged Material Proposed for Discharge in Waters of the U.S. - Testing Manual" (the Inland Testing Manual or ITM), published in February, 1998 by the U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers). The group reached a consensus opinion that the proposed dredge material is suitable for aquatic disposal.

(2) BIOLOGICAL CHARACTERISTICS AND ANTICIPATED CHANGES

Endangered Species - No proposed or listed threatened or endangered species of plants or animals are known to occur near the proposed dredge and disposal sites.

Habitat for Fish, Other Aquatic Organisms, and Wildlife - The removal of approximately 12,000 cubic yards of sediment from the North Harbor area could have short-term, adverse impacts on fish and fish habitats by temporarily increasing TSS in the water column and possibly decreasing DO levels during dredge operations. However, conditions in the water column at the dredge site would likely return to pre-dredge conditions shortly after completion of each dredging episode. The removal of bottom sediments could also result in the removal of benthic organisms from the harbor area.

The impacts, from dredging, to habitats are considered adverse, short-term and minor.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The proposal would impact approximately 2.4 acres of EFH utilized by various coastal fish species. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in California waters. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

b. IMPACTS ON RESOURCES OUTSIDE THE AQUATIC ECOSYSTEM

(1) PHYSICAL CHARACTERISTICS AND ANTICIPATED CHANGES

Air Quality - A conformity determination (Clean Air Act Section 176[c] [42 USC Section 7506(c)]) is not required for maintenance dredging and disposal at an approved disposal site consistent with 40 CFR 51.853(c)(2)(ix).

Noise Conditions - Short-term, adverse impacts on noise conditions in the local area could be expected from the operation of dredging equipment, with an expected increase in ambient noise levels.

(2) SOCIOECONOMIC CHARACTERISTICS AND ANTICIPATED CHANGES

Aesthetic Quality - The maintenance dredging operations would have short-term, adverse impacts on visual resources in the area. However, since dredging equipment and barges are nearly always present in the harbor between November and June, the impact would likely be minor.

Economics - Long-term, beneficial impacts to the Port District as well as the City of and County of Santa Cruz, are likely to result if the results of the demonstration project are favorable for the Port District.

Transportation (Navigation) - Maintenance dredging of the North Harbor area would have major, long-term benefits by allowing safe navigation within the North Harbor.

(3) HISTORIC - CULTURAL CHARACTERISTICS AND ANTICIPATED CHANGES

Given the North Harbor has been previously dredged to depths equal to those requested in the subject permit application, it is unlikely any historic properties are present at the proposed dredging site. However, if any archaeological resources are encountered during the dredging operations, the Corps of Engineers would consult with the State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and take into account any project effects on such properties.

c. SUMMARY OF INDIRECT IMPACTS

None have been identified.

d. SUMMARY OF CUMULATIVE IMPACTS

The maintenance dredging of approximately 12,000 cubic yards (cys) of sediment from the North Harbor would cumulatively contribute to the resuspension of sediments in the harbor system. The contribution of the proposed amounts of sediment to this process probably represents a minor adverse impact.

e. CONCLUSIONS AND RECOMMENDATIONS

Based on an analysis of the above identified impacts, a preliminary determination has been made that it will not be necessary to prepare an Environmental Impact Statement (EIS) for subject permit application. The Environmental Assessment for the proposed action, however, has not yet been finalized and this preliminary determination may be reconsidered if additional information is developed.

5. **EVALUATION OF ALTERNATIVES**: Evaluation of this activity's impact on the public interest will also include application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)).

6. **PUBLIC INTEREST EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so the conditions under which it will be

allowed to occur, are therefore determined by the outcome of the general balancing process. That decision will reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

7. **CONSIDERATION OF COMMENTS:** The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

8. **SUBMISSION OF COMMENTS:** Interested parties may submit in writing any comments concerning this activity. Comments should include the applicant's name, the number, and the date of this notice and should be forwarded so as to reach this office within the comment period specified on page one of this notice. Comments should be sent to: Mr. Rob Lawrence, Regulatory Branch. It is Corps policy to forward any such comments which include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose address is indicated in the first paragraph of this notice, or by contacting Mr. Rob Lawrence of our office at telephone (415) 977-8447 or by e-mail to rlawrence@spd.usace.army.mil. Details on any changes of a minor nature which are made in the final permit action will be provided on request.